

Application No.: 10/500,365

Docket No.: 22106-00065-US1

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of the Claims:

1-8. (Canceled)

9. (New) A switch comprising:

a primary switching device operating on a power line; and

an electronic device unit that acquires from at least one of a current measuring device and a voltage measuring device signals indicative of primary current and primary voltage values of said power line and that sends control and operation commands to said primary switching device,

wherein said current and voltage measuring devices are integrated within said switch so that said voltage measuring device performs a measurement of said primary voltage through a capacitive coupling arrangement comprising said current measuring device, and

wherein said capacitive coupling arrangement uses said current measuring device as a floating potential electrode.

10. (New) The switch of claim 9, wherein the physical integration of said current and/or voltage measuring devices is realized through the integration of said current and voltage measuring devices in a pole of said switch.

11. (New) The switch of claim 9, wherein the physical integration of current and/or voltage measuring device is realized through the integration of said devices on the pole contact arm.

12. (New) The switch according to claim 9, wherein said current measuring device comprises a capacitor divider.

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13. (New) The switch according to claim 9, wherein said current measuring device comprises a Rogowsky coil.
14. (New) The switch according to claim 10, wherein said current measuring device comprises a Rogowsky coil.
15. (New) The switch according to claims 11, wherein said current measuring device comprises a Rogowsky coil.
16. (New) The switch according to claim 9, wherein said current measuring device comprises an array of Hall effect current sensors.
17. (New) The switch according to claim 10, wherein said current measuring device comprises an array of Hall effect current sensors.
18. (New) The switch according to claim 11, wherein said current measuring device comprises an array of Hall effect current sensors.